



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,338	03/10/2005	Kazunori Kusano	082407	3526

38834 7590 11/17/2009  
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP  
1250 CONNECTICUT AVENUE, NW  
SUITE 700  
WASHINGTON, DC 20036

EXAMINER
----------

SINGH, SUNIL K

ART UNIT	PAPER NUMBER
----------	--------------

3732

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

11/17/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/527,338	<b>Applicant(s)</b> KUSANO, KAZUNORI	
	<b>Examiner</b> Sunil K. Singh	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

This action is in response to Applicant's arguments filed on 05/05/2009. The Applicant's remarks are persuasive, thus the Non-Final Rejection mailed out on 02/13/2009 has been withdrawn. The rejection based on the newly cited reference is as follows:

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3,4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusano (US 6,508,647) in view of Gleave et al. (US 4,105,715).

Kusano discloses a kit (Figs. 7 and 8) that includes: a probe syringe (1); a current detector device (101); a discharge part (4) formed with a flexible hollow material (Column 6, Lines 40-41) and being positioned on top of the probe syringe (Fig. 3a); a cylinder part (2) continuous to said discharge part and retaining an ion conductive paste (D) (Fig. 3a); a piston (3) inserted into cylinder (Fig. 3a); and an electric conductive member (10) (Column 7, Lines 1-10) connecting inner and outer areas of said probe syringe and disposed across the discharge part (Figs. 3a and 3b) (Column 3, Lines 28-45); and the ion conductive paste comprises conductive material selected from the group propylene glycol (Column 4, Line 33; and Column 2, Line 57). However, Kusano fails to disclose the ion conductive paste being aqueously dispersed and having

Art Unit: 3732

thixotropic properties and wherein the thixotropic ion conductive paste has the viscosity from 0.1 Pa to 5 Pa and thixotropy.

Gleave teaches a paste that has thixotropic properties that are aqueously dispersed since pastes having thixotropic properties have strong consistency-imparting properties thus retaining most of the bond strength (Column 2, Lines 25-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kusano to include a paste having thixotropic properties, as taught by Gleave, in order to provide a paste that retains most of its bond strength. Kusano/Gleave does disclose a paste and therefore the paste has an inherent viscosity. However, Kusano/Gleave fail to disclose the thixotropic ion conductive paste having a viscosity that specifically ranges from 0.1 Pas to 5 Pas. It would have been obvious to one having ordinary skill in the art to modify Kusano/Gleave to include a paste having the claimed low viscosity ranges in order to ensure easy flow of the paste through a syringe having a small diameter opening. Furthermore, it would have been obvious to one having ordinary skill in the art to modify Kusano/Gleave by including a thixotropic ion conductive paste having a viscosity in the range from 0.1 Pa to 5 Pa, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. See *In re Aller*, 105 USPQ 233.

3. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusano in view of Gleave and further in view of Caizza (US 5,964,737).

Kusano/Gleave discloses the invention substantially as claimed except for a syringe having a discharge part made of silicone rubber.

Caizza teaches a syringe having an end piece (34 in Fig. 2b) made out of silicone rubber in order to provide a tip with elastomeric properties (Column 7, Lines 43-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kusano/Gleave by having the discharge part of the syringe being made of silicone rubber, as taught by Caizza, in order to provide a syringe tip with elastomeric properties.

### ***Response to Arguments***

4. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil K. Singh whose telephone number is (571) 272-3460. The examiner can normally be reached on Monday-Friday (Increased Flex Schedule).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris L. Rodriguez can be reached on (571) 272-4964. The fax phone

Art Unit: 3732

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

07/29/2009

/Sunil K Singh/  
Examiner, Art Unit 3732

/Cris L. Rodriguez/  
Supervisory Patent Examiner, Art Unit 3732